Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1 to 26 (canceled).

27. (Currently Amended): An isoelectric gateway for altering the composition of a sample that comprises at least one amphoteric compound and at least one different compound that is amphoteric or non-amphoteric, comprising

(i) a first ion-permeable barrier;

(ii) a second ion-permeable barrier at a predetermined distance from the first ion-permeable barrier; and

(iii) ~~an~~ a stationary isoelectric substance situated between the first and the second ion-permeable barriers,

wherein

the first and the second ion-permeable barriers substantially retain the stationary isoelectric substance between the first and the second ion-permeable barriers, and

the isoelectric substance is not bound to either the first or the second ion-permeable barrier.

28. (Previously Presented): The isoelectric gateway according to claim 27, wherein the first ion-permeable barrier and the second ion-permeable barrier are independently selected from the group consisting of a porous solid and a gel.

29. (Currently Amended): The isoelectric gateway according to claim 28, wherein the first ion-permeable barrier and the second ion-permeable barrier are each a porous solid, and the porous solid is a non-ionic membrane, an isoelectric membrane or a frit.

30. (Currently Amended): The isoelectric gateway according to claim 28, wherein the first ion-permeable barrier and the second ion-permeable barrier are each a gel, and the gel is

non-ionic or isoelectric.

31. (Currently Amended): The isoelectric gateway according to claim 29, wherein the porous solid is a non-ionic membrane, and the non-ionic membrane comprises a cellulose ester, a polysulfone, a polyethersulfone or a cross-linked polymethylacrylate.

32. (Currently Amended): The isoelectric gateway according to claim 29, wherein the first ion-permeable barrier and the second ion-permeable barrier are each a non-ionic membrane, and the non-ionic membrane comprises agar or a cross-linked polyacrylamide supported on at least one of glass fibers, filter paper, paper or polymeric mesh.

33. (Currently Amended): The isoelectric gateway according to claim 29, wherein the porous solid is a frit, and the frit is a glass frit or a polymeric frit.

34. (Currently Amended): The isoelectric gateway according to claim 27, wherein the stationary isoelectric substance is a molecule containing a combination of a weak acid functionality and a weak base functionality, or a weak acid functionality and a strong base functionality, or a strong acid functionality and a weak base functionality.

35. (Currently Amended): The isoelectric gateway according to claim 27, wherein the stationary isoelectric substance is selected from the group consisting of polymers containing amino groups and at least one selected from carboxylic acid groups, phenolic groups, phosphonic acid groups and sulfonic acid groups; polymers containing imino groups and at least one selected from carboxylic acid groups, phenolic groups, phosphonic acid groups and sulfonic acid groups; polymers containing quaternary ammonium groups and at least one selected from carboxylic acid groups, phenolic groups, phosphonic acid groups and sulfonic acid groups; and combinations thereof.

36. (Currently Amended): The isoelectric gateway according to claim 27, wherein the stationery isoelectric substance has a pK value that is less than 2 pH units from its pI value.

37. (Currently Amended): The isoelectric gateway according to claim 36, wherein the stationary isoelectric substance has a pK value that is less than 1.5 pH units from its pI value.

38. (Currently Amended): The isoelectric gateway according to claim 36, wherein the stationary isoelectric substance has a pK value that is less than 1 pH unit from its pI value.

39. (Currently Amended): The isoelectric gateway according to claim 27, wherein the stationary isoelectric substance has a pI ranging from about 1 to about 13.

Claims 40-41: (Canceled).

42. (Previously Presented): The isoelectric gateway according to claim 27, wherein the at least one amphoteric compound is selected from the group consisting of a natural amino acid, a non-natural amino acid, an aminophenol, an aminophosphonic acid, an oligopeptide, a polypeptide, a protein and an oligonucleotide.

43. (Currently Amended): A method for altering the composition of a sample that comprises at least one amphoteric compound and at least one different compound that is amphoteric or non-amphoteric, comprising

(a) contacting the sample with an isoelectric gateway comprising

(i) a first ion-permeable barrier;

(ii) a second ion-permeable barrier at a predetermined distance from the first ion-permeable barrier; and

(iii) ~~an~~ a stationary isoelectric substance situated between the first and the second ion-permeable barriers,

wherein

the first and the second ion-permeable barriers substantially retain the isoelectric substance between the first and the second ion-permeable barriers, and

the isoelectric substance is not bound to either the first or the second ion-permeable barrier; and

(b) applying a selected electric potential across associated electrodes positioned

on opposing sides of the isoelectric gateway to cause migration of at least one of the at least one amphoteric compound and the at least one different compound when it is amphoteric through at least one of the first and the second ion-permeable barriers.

44. (Currently Amended): An electrophoresis system for isoelectric focusing comprising

(a) a first electrolyte chamber containing a first electrode;

(b) a second electrolyte chamber containing a second electrode, wherein the second electrolyte chamber is situated relative to the first electrolyte chamber so that the first and the second electrodes generate an electric field upon application of a selected electric potential between the first and the second electrodes;

(c) a first sample chamber situated between the first and the second electrolyte chambers so as to be at least partially included within the electric field;

(d) a first isoelectric gateway separating the first electrolyte chamber and the first sample chamber, wherein the first isoelectric gateway comprises

(i) a first ion-permeable barrier;

(ii) a second ion-permeable barrier at a predetermined distance from the first ion-permeable barrier; and

(iii) ~~an~~ a stationary isoelectric substance situated between the first and the second ion-permeable barriers,

wherein

the first and the second ion-permeable barriers substantially retain the stationary isoelectric substance between the first and the second ion-permeable barriers, and

the isoelectric substance is not bound to either the first or the second ion-permeable barrier;

(e) a first selective barrier separating the first and the second sample chambers so as to impede convective mixing between contents of the first and the second sample chambers;

(f) a second selective barrier separating the second sample chamber from the second electrolyte chamber so as to impede convective mixing between contents of the second sample chamber and the second electrolyte chamber;

(g) means for conveying an associated first electrolyte to the first electrolyte chamber;

(h) means for conveying an associated second electrolyte to the second electrolyte chamber; wherein the pH values of the associated first and second electrolytes are different;

(i) means for conveying a first fluid to the first sample chamber;

(j) means for conveying a second fluid to the second sample chamber, wherein at least one of the first and the second fluids contains a sample that comprises at least one amphoteric compound and at least one different compound that is amphoteric or non-amphoteric; and

(k) means for applying a selected electric potential between the first and the second electrodes, wherein application of the selected electric potential causes migration of at least one of the at least one amphoteric compound and the at least one different compound when it is amphoteric through at least one of the ion-permeable barriers.

45. (Previously Presented): The electrophoresis system according to claim 44, wherein a pH gradient is formed between the first and the second electrodes.

46. (Previously Presented): The electrophoresis system according to claim 44, wherein the first selective barrier is a second isoelectric gateway which separates the first and the second sample chambers, wherein the second isoelectric gateway comprises

(i) a third ion-permeable barrier;

(ii) a fourth ion-permeable barrier at a predetermined distance from the third ion-permeable barrier; and

(iii) an isoelectric substance situated between the third and the fourth ion-permeable barriers,

wherein

the third and the fourth ion-permeable barriers substantially retain the isoelectric substance

between the third and the fourth ion-permeable barriers, and

the isoelectric substance is not bound to either the third or the fourth ion-permeable barrier.

47. (Previously Presented): The electrophoresis system according to claim 44, wherein the second selective barrier is a second isoelectric gateway which separates the second sample chamber from the second electrolyte chamber, wherein the second isoelectric gateway comprises

(i) a third ion-permeable barrier;

(ii) a fourth ion-permeable barrier at a predetermined distance from the third ion-permeable barrier; and

(iii) an isoelectric substance situated between the third and the fourth ion-permeable barriers,

wherein

the third and the fourth ion-permeable barriers substantially retain the isoelectric substance between the third and the fourth ion-permeable barriers, and

the isoelectric substance is not bound to either the third or the fourth ion-permeable barrier.

48. (Previously Presented): The electrophoresis system according to claim 44, wherein

(a) the first selective barrier is a second isoelectric gateway which separates the first and the second sample chambers, wherein the second isoelectric gateway comprises

(i) a third ion-permeable barrier;

(ii) a fourth ion-permeable barrier at a predetermined distance from the third ion-permeable barrier; and

(iii) an isoelectric substance situated between the third and the fourth ion-permeable barriers,

wherein

the third and the fourth ion-permeable barriers substantially retain the isoelectric substance between the third and the fourth ion-permeable barriers, and

the isoelectric substance is not bound to either the third or the fourth ion-permeable barrier; and

(b) the second selective barrier is a third isoelectric gateway which separates the

second sample chamber from the second electrolyte chamber, wherein the third isoelectric gateway comprises

(i) a fifth ion-permeable barrier;

(ii) a sixth ion-permeable barrier at a predetermined distance from the fifth ion-permeable barrier; and

(iii) an isoelectric substance situated between the fifth and the sixth ion-permeable ion barriers,

wherein

the fifth and the sixth ion-permeable barriers substantially retain the isoelectric substance between the fifth and the sixth ion-permeable barriers, and

the isoelectric substance is not bound to either the fifth or the sixth ion-permeable barrier.

49. (Currently Amended): A method for isoelectric focusing, comprising

(a) conveying a first electrolyte to a first electrolyte chamber containing a first electrode;

(b) conveying a second electrolyte to a second electrolyte chamber containing a second electrode, wherein the second electrolyte chamber is situated relative to the first electrolyte chamber so that the first and the second electrodes generate an electric field upon application of a selected electric potential between the first and the second electrodes;

(c) conveying a first fluid to a first sample chamber situated between the first and the second electrolyte chambers so as to be at least partially included within the electric field;

(d) conveying a second fluid to a second sample chamber situated between the first sample chamber and the second electrolyte chamber so as to be at least partially included within the electric field, wherein a first isoelectric gateway separates the first electrolyte chamber and the first sample chamber, the first isoelectric gateway comprising

(i) a first ion-permeable barrier;

(ii) a second ion-permeable barrier at a predetermined distance from the first ion-permeable barrier; and

(iii) ~~an~~ a stationary isoelectric substance situated between the first and the second ion-permeable barriers,

wherein

the first and the second ion-permeable barriers substantially retain the stationary isoelectric substance between the first and the second ion-permeable barriers, and

the isoelectric substance is not bound to either the first or the second ion-permeable barrier; and

a first selective barrier separates the first and the second sample chambers so as to impede convective mixing between contents of the first and the second sample chambers,

and

a second selective barrier separates the second sample chamber and the second electrolyte chamber so as to impede convective mixing between contents of the second sample chamber and the second electrolyte chamber, wherein at least one of the first and the second fluids contains a sample that comprises at least one amphoteric compound and at least one different compound that is amphoteric or non-amphoteric; and

(e) applying a selected electric potential to cause migration of at least one of the at least one amphoteric compound and the at least one different compound when it is amphoteric through at least one of the ion-permeable barriers.

50. (Previously Presented): The method according to claim 49, wherein a pH gradient is formed between the first and the second electrodes.

51. (Previously Presented): The method according to claim 49, wherein the first selective barrier is a second isoelectric gateway which separates the first and the second sample chambers, wherein the second isoelectric gateway comprises

(i) a third ion-permeable barrier;

(ii) a fourth ion-permeable barrier at a predetermined distance from the third ion-permeable barrier; and

(iii) an isoelectric substance situated between the third and the fourth ion-permeable barriers,

wherein

the third and the fourth ion-permeable barriers substantially retain the isoelectric

substance between the third and the fourth ion-permeable barriers, and

the isoelectric substance is not bound to either the third or the fourth ion-permeable barrier.

52. (Previously Presented): The method according to claim 49, wherein the second selective barrier is a second isoelectric gateway which separates the second sample chamber from the second electrolyte chamber, wherein the second isoelectric gateway comprises

(i) a third ion-permeable barrier;

(ii) a fourth ion-permeable barrier at a predetermined distance from the third ion-permeable barrier; and

(iii) an isoelectric substance situated between the third and the fourth ion-permeable barriers,

wherein

the third and the fourth ion-permeable barriers substantially retain the isoelectric substance between the third and the fourth ion-permeable barriers, and

the isoelectric substance is not bound to either the third or the fourth ion-permeable barrier.

53. (Previously Presented): The method according to claim 49, wherein

(a) the first selective barrier is a second isoelectric gateway which separates the first and the second sample chambers, wherein the second isoelectric gateway comprises

(i) a third ion-permeable barrier;

(ii) a fourth ion-permeable barrier at a predetermined distance from the third ion-permeable barrier; and

(iii) an isoelectric substance situated between the third and the fourth ion-permeable barriers,

wherein

the third and the fourth ion-permeable barriers substantially retain the isoelectric substance between the third and the fourth ion-permeable barriers, and

the isoelectric substance is not bound to either the third or the fourth ion-permeable barrier; and

(b) the second selective barrier is a third isoelectric gateway which separates the second sample chamber from the second electrolyte chamber, wherein the third isoelectric gateway comprises

(i) a fifth ion-permeable barrier;

(ii) a sixth ion-permeable barrier at a predetermined distance from the fifth ion-permeable barrier; and

(iii) an isoelectric substance situated between the fifth and the sixth ion-permeable barriers,

wherein

the fifth and the sixth ion-permeable barriers substantially retain the isoelectric substance between the fifth and the sixth ion-permeable barriers, and

the isoelectric substance is not bound to either the fifth or the sixth ion-permeable barrier.